PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF JANUARY 15, 1929

A regular meeting of the New York Entomological Society was held at 8 P. M., on January 15, 1929, in the American Museum of Natural History; President Henry Bird in the chair with sixteen members and two visitors present.

The treasurer, William T. Davis, reported a balance January 1, 1929, of \$1579.35.

A rising vote of thanks was tendered to Mr. Davis for his twenty-five years of efficient service as treasurer of the Society.

The Nominating Committee submitted the following nominations for officers of the Society in 1929, viz.:

For President	Wm. T. Davis
For Vice-President	Andrew J. Mutchler
For Secretary	Chas. W. Leng
For Treasurer	G. C. Hall
For Librarian	Frank E. Watson
For Curator	A. J. Mutchler

Executive Committee

Publication Committee

Henry Bird Harry B. Weiss H. G. Barber F. E. Lutz Howard Notman C. E. Olsen Ernest Shoemaker

Herbert F. Schwarz

John D. Sherman, Jr.

Nominating Committee

H. G. Barber

John D. Sherman, Jr.

Frank E. Watson

Mr. Davis protested against his nomination for the presidency but was overruled by the chair. In the absence of other nominations, the Secretary, on motion duly seconded and carried, cast an affirmative ballot for the nominees of the committee.

Mr. Bird, in resigning the chair to Mr. Davis, commented on the approbation of the JOURNAL expressed at the recent meetings, and its value in bringing to light the knowledge possessed by its contributors.

Mr. Davis thanked the members present for the honor conferred upon him and expressed his regret that so many were absent; in most cases by reason of illness.

Mr. J. R. de la Torre Bueno was elected a member.

Dr. F. O. Holmes spoke on the subject, "Methods for the study of the genus Oncopeltus (Heteroptera)," and showed specimens of eggs, nymphs, and adults of Oncopeltus fasciatus from colonies maintained in small glass cages in the laboratory in the absence of green plants. Dry milkweed (Asclepias) seeds are furnished for food, and inverted tubes of drinking water are supplied. The insects drink water and feed on the dry seed eagerly, multiplying abundantly in the confined quarters. When numerous the insects present all stages of development simultaneously, and form brilliant exhibits for life history demonstrations.

His remarks were discussed by several members, Mr. Barber especially describing his results from winter sifting and early spring collecting which led him to believe that many Heteroptera overwinter as adults.

MEETING OF FEBRUARY 5, 1929

A regular meeting of the New York Entomological Society was held at 8 P. M., on February 5, 1929, in the American Museum of Natural History; President Wm. T. Davis in the chair with sixteen members and nine visitors present.

Henry Bird became a life member.

Aminadov Glanz, 164 Ross St., Brooklyn, was proposed for membership by Mr. Angell.

The death on January 15, of Prof. Edwin E. Calder, of Providence, R. I., a member of the Society for many years, was announced. Dr. Calder was in his 76th year, Dean of the Rhode Island College of Pharmacy, and a student of Coleoptera, particularly *Cicindelidæ*, in which family he had described three species.

The death on January 19, of Col. Wirt Robinson, of Wingina, Virginia, a contributor of many items to the New York List of Insects, who had frequently entertained several members of the Society at his home in the West Point Military Academy, where he was professor of Chemistry, Mineralogy and Geology until October 16, 1928, was spoken of by Mr. Davis. Col. Robinson was born October 15, 1864, in Virginia, graduated from the Military Academy in 1887, and served in the U. S. Army until he was retired for age. During his service of forty-five years in the Army he was not only a versatile student but also an indefatigable collector. His private museum at Wingina, built by himself, was filled with personally prepared specimens of archæology and zoology which have been bequeathed to the U. S. National Museum.

Dr. Lutz spoke of the death of Dr. Harrison G. Dyar, at Washington, D. C., and recalled his long service on the Publication Committee of the Society.

Dr. S. Parfentev presented a paper, "Notes from Russia," which was read by Dr. Hartzell. This paper, giving a comprehensive view of Entomology, in all its branches, in Russia, will be printed in full.

Mr. Wm. A. Hoffman read a paper, illustrated by lantern slides, entitled "Notes on Haitian Anopheles." He showed a map of the places visited, described the methods of study, and the character of the breeding places, illustrating the latter especially by views showing what he termed "manmade" homes for the larva. Some of the larval characters by which the malarial mosquito was recognized were shown.

Mr. Notman exhibited Asaphidion flavipes Linn. collected in numbers under shingles at Bowne Avenue and Northern Boulevard, Kissena locality, Queens, Long Island, in May, by Kenneth W. Cooper and A. Killen.

Mr. Leng exhibited "A Revision of the North American species of Buprestid Beetles belonging to the genus Agrilus" by W. S. Fisher which adds six species, viz.: champlaini, arcuatus subsp. torquatus, juglandis, 4-impressus, viridis subsp. fagi, and celti, to the New York State List.

Mr. Mutchler reported on the special meeting of December 30 attended by 130 persons and expressed the thanks of the Committee to the American Museum of Natural History, to Dr. Moore, Dr. Horsfall, and the following ladies whose presence contributed to the success of the event: Miss Alexander, Miss Bird, Mrs. Brues, Mrs. Burns, Dr. Dobroschky, Mrs. Hartzell, Mrs. Horsfall, Mrs. Melander, Mrs. Moore, Mrs. Chris. Olsen, Miss Dorothy Olsen, Miss Ruth Olsen, Mrs. Schwarz.

Thanks were also due to the Museum for loaning dishes and taking care of ordering cakes, tea and the accessories which go with them, and to Mrs. Snow for loan of silverware.

Mr. Davis exhibited three specimens of Lepidoptera which for twenty-five years had been uncovered in a vertical bookcase without dermestid damage.

Mr. Mutchler concurred in the opinion that insects are less liable to such damage on a smooth vertical surface. He also spoke of the deciduous mandibular cusp in *Otiorhynchidæ*.

Mr. Angell spoke of the European Anomala ænea having been found at Engelwood Cliffs.

MEETING OF FEBRUARY 19, 1929

A regular meeting of the New York Entomological Society was held at 8 P. M., on February 19, 1929, in the American Museum of Natural History; President Wm. T. Davis in the chair with sixteen members and six visitors present.

The Publication Committee reported Dr. Willem Rudolfs as the speaker at the next meeting.

Mr. Aminadov Glanz, 164 Ross St., Brooklyn, was elected a member of the Society.

Mr. Notman under the title "Coleoptera from Southern Utah" described the localities in which he had collected, illustrating his descriptions with stereopticon views from his own photographs. The elevations varied from 3,700 to 9,300 feet and there were also variations in the local environments, though each was near water if possible. Mr. Notman's collecting was

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especially designed to produce the species of the genus Bembidion, of which he has made a close study. The characters by which the species were separated were shown by blackboard drawings and explained verbally. Three boxes of excellently mounted and labeled specimens were shown.

Mr. Chapin showed living specimens of *Galerita* and *Lucanus* collected a few days ago.

Mr. Davis exhibited specimens of Cicada recently described by him in our JOURNAL, calling attention especially to forty-two specimens of marevagans received from Dr. Beamer only fifteen days after it had been described.

MEETING OF MARCH 5, 1929

A regular meeting of the New York Entomological Society was held at 8 P. M., on March 5, 1929, in the American Museum of Natural History; President Wm. T. Davis in the chair with seventeen members and six visitors present.

The Program Committee reported Mr. Barber as the speaker at meeting of March 19, 1929.

Dr. Willem Rudolfs spoke on "The Composition of Water and Mosquito Breeding." After pointing out that the mosquitoes were observed to breed in one pool and not in another, apparently not dissimilar, he detailed the experiments of the past five years to ascertain the ultimate cause of the difference.

- 1. It has been contended that the reaction of water was responsible. We find that mosquitoes will breed practically in all natural waters if sufficient food supply is present.
- 2. The chemical composition of the water is as a rule no factor provided sufficient food is present.
- 3. Whenever microscopic animals (diatoms, protozoa) and plants (fungi) are low, breeding is absent.
 - 4. Breeding occurs with high and low numbers of bacteria.
- 5. The type of decomposition of the organic materials present in the water or at the bottom of the pools stimulates the growth of certain plankton organisms, which is in turn food for the mosquito larvæ.
- 6. If the type of decomposition is changed or hampered mosquito breeding is absent or the larve are stunted and do not emerge.
- 7. Feeding the larvæ on a diet of pure cultures of certain microscopic animals they remain alive for a long time but do not emerge. Feeding them on other pure cultures they grow fast and emerge quickly.
- 8. This lack of emergence coincides with an entirely different behavior of the larvæ—they react differently to light, etc.
 - 9. Mosquitoes fed on "one-sided" food lay unfertile eggs.
- 10. Since specific substances either present in the water or produced by the decomposition of vegetable matter seem to be responsible for the growth of microorganisms and subsequently for the breeding of mosquitoes it follows that an entirely new method of mosquito control can be worked out.

Dr. Felt and Messrs. Angell, Bigelow, Bromley, Weiss and Davis joined in the subsequent discussion, the latter recalling the Sulphur Bacteria, Beggiatoa, found in Salt Meadow creeks, and unfriendly to mosquito larvæ.

Mr. Angell exhibited the ant *Camponotus pennsylvanicus* and photographs of a pine tree, in which they were working, and which was blown down at Cooks Falls, N. Y., on November 19 last.

Mr. Bromley and Mr. Davis discussed the migration of *Anax junius*; abundant at Lake Worth, Florida, December 23. Mr. Davis recalled its sudden appearance on Staten Island one year on March 30, 1907.